

Remarks/Arguments

The official office action dated March 22, 2007 has been carefully considered. Claims 1-8 and 10-26 remain in the application. Claim 9 has been canceled and claims 27-32 have been withdrawn. Claim 1 has been amended to more particularly point out and distinctly claim Applicants' invention. Claim 33 is new. Applicants believe the claims presented herewith are sufficient to place the present application in condition for allowance. Reconsideration is respectfully requested.

Election/Restriction Requirement

The Examiner has required a restriction to one invention from Groups I and II:

- I. Claims 1-26, drawn to an electrochemical cell design
- II. Claims 27-32, drawn to a chemical generation system

Applicants elect group I. – electrochemical cell design, without traverse, claims 1-26 reading thereon. The remaining claims in the application have been identified as withdrawn in the listing of the claims above.

Claim Objections

Claim 9 is objected to as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant has canceled claim 9, thus rendering the objection moot.

Claims Rejections under 35 U.S.C. §112

Claims 1-26 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. This rejection is respectfully traversed.

The Examiner asserts that there is insufficient antecedent basis for the limitation

“the resultants,” as recited in line 14 of claim 1. Claim 1 has been amended to remove the term “the” and Applicants believe claim 1 is allowable under 35 U.S.C. §112.

The Examiner asserts that there is insufficient antecedent basis for the limitation “said automatic cleaning appliance,” as recited in claim 4. However, Applicants direct the Examiner to line 1 of claim 1, which first recites “an automatic cleaning appliance.” Since claim 4 depends from and includes the same distinctive features of claim 1, Applicants believe claim 4 is allowable under 35 U.S.C. §112.

The Examiner asserts that there is insufficient antecedent basis for the limitation “said automatic cleaning appliance,” as recited in claim 6. However, Applicants direct the Examiner to line 1 of claim 1, which first recites “an automatic cleaning appliance.” Since claim 6 depends from and includes the same distinctive features of claim 1, Applicants believe claim 6 is allowable under 35 U.S.C. §112.

Claims Rejections under 35 U.S.C. §102

Claims 1, 2, 8, 10, 11, 13, 16, 17, 18, and 26 stand rejected under 35 U.S.C. §102(b) as being anticipated by Von Broembsen, U.S. Pat. No. 6,821,398. This rejection is respectfully traversed.

The Examiner asserts that Von Broembsen teaches a first metallic plate, a last metallic plate and a plurality of intermediate plates, each of said plates having two essentially parallel sides with a large surface area in comparison with a peripheral side connecting said parallel sides and each of said intermediate plates arranged with one of said parallel sides of one plate facing one of said parallel sides of an adjacent plate. The Examiner further asserts that Von Broembsen teaches a connection between a positive electrode of a source of direct electrical current and said first plate and a connection between a negative electrode of said source of direct electrical current and said last plate. Finally, the Examiner contends that Von Broembsen teaches an inlet to allow the introduction of a fluid containing a chemical composition to be decomposed by said cell device and an outlet to allow the dispensing of resultants of the decomposition. However, Applicants can find no teaching or suggestion of “a sensing system provided

within a cavity of the automatic cleaning appliance...configured to measure properties of wash liquor in the cavity of the automatic cleaning appliance and control dispensing of the chemical composition into the automatic cleaning appliance based on the measurement,” as recited in independent claim 1. Support for this limitation can be found in at least paragraph [0067] of Applicants’ specification which states:

The control would also be used to deliver the oxidizing agent to the wash liquor to maximize performance by using sensors. Some types of sensors that may be preferred include pressure, pH, oxidation reduction potential, turbidity and conductivity.

Since Von Broembsen fails to teach every element of claim 1, Applicants submit that claim 1 is allowable under 35 U.S.C. §102(b). Since claims 2, 8, 10, 11, 13, 16, 17, 18, and 26 depend from and include the same distinctive features of allowable claim 1, Applicants submit that claims 2, 8, 10, 11, 13, 16, 17, 18, and 26 are also allowable.

Claim Rejections under 35 U.S.C. §103

Claims 22-25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen and further in view of Bentley, U.S. Pat. No. 6,716,325. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Bentley does not cure the deficiencies of Von Broembsen. Since claims 22-25 depend from and include the same distinctive features of allowable claim 1, Applicants submit that claims 22-25 are also allowable.

Claims 14, 15, 19, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Grannersberger, U.S. Pat. No. 6,391,167. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Grannersberger does not cure the deficiencies of Von Broembsen. Although Grannersberger teaches a flow sensor to control operation of the electrolytic cell, the flow sensor is provided within the chlorinator and thus measures the flow of the chemical composition through the

chlorinator. The location of the flow sensor is described in detail in column 3, lines 20-24 and Figure 2 of Grannersberger. In contrast, Applicants' sensing system measures properties of the wash liquor in the cavity of the automatic cleaning appliance. Due to the location of Applicants' sensing system, dispensing of the chemical composition is controlled by the measured properties of the wash liquor in the cavity of the automatic cleaning appliance and not on the properties of the chemical composition, as in Grannersberger. Since claims 14, 15, 19, and 20 depend from and include the same distinctive features of allowable claim 1, Applicants submit that claims 14, 15, 19, and 20 are also allowable.

Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Hamand, U.S. Pat. No. 6,513,180. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Hamand does not cure the deficiencies of Von Broembsen. Since claim 4 depends from and includes the same distinctive features of allowable claim 1, Applicants submit that claim 4 is also allowable.

Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Hamand and further in view of Wiegand, U.S. Pat. No. 2,917,685. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Hamand and Wiegand do not cure the deficiencies of Von Broembsen. Since claim 5 depends from and includes the same distinctive features of allowable claim 1, Applicants submit that claim 5 is also allowable.

Claims 12 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen and further in view of Sicilano, U.S. Pat. No. 6,125,481. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Sicilano does not cure the deficiencies of Von Broembsen. Although Sicilano teaches several sensors, including a chlorine sensor, pH sensor, heater sensor, pressure sensors, and flow sensor, Applicant

can find no teaching or suggestion of the sensors being provided “within a cavity of the automatic cleaning device,” as recited in independent claim 1. In contrast, the sensors in Sicilano are mounted on a pipe downstream of the dispensers, as disclosed in column 5, lines 1-39. Since claims 12 and 21 depend from and include the same distinctive features of allowable claim 1, Applicants submit that claims 12 and 21 are also allowable.

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Ahmed et al., U.S. Pat. No. 5,076,952. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Ahmed does not cure the deficiencies of Von Broembsen. Since claim 6 depends from and includes the same distinctive features of allowable claim 1, Applicants submit that claim 6 is also allowable.

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Ahmed et al. and further in view of Wiegand. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Ahmed and Wiegand do not cure the deficiencies of Von Broembsen. Since claim 7 depends from and includes the same distinctive features of allowable claim 1, Applicants submit that claim 7 is also allowable.

Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Von Broembsen in view of Ofenloch, U.S. Pat. No. 4,599,158. This rejection is respectfully traversed.

For the reasons stated above, Applicants believe claim 1 is allowable over Von Broembsen. Furthermore, Applicants respectfully submit that Ofenloch does not cure the deficiencies of Von Broembsen. Since claim 3 depends from and includes the same distinctive features of allowable claim 1, Applicants submit that claim 3 is also allowable.

New Claims

Claim 33 is new. Support for this claim can be found in at least paragraph [0067] of Applicants' specification.

If any additional charges or fees must be paid in connection with the following communication, they may be paid out of our Deposit Account No. 23-1660.

Notification of allowability is respectfully requested. If there are any questions regarding this matter, please contact the attorney of record.

Respectfully submitted,

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CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this correspondence is, on the date shown below, being transmitted by EFS-Web to the Patent and Trademark Office.

Date: June 18, 2007

/Deborah A. Tomaszewski/

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